

WHAT IS CLAIMED IS:

1. An automatic chemical analyzer capable of determining the plural components of a sample by using the independent reagents for the respective components, in which the sections of conducting transfer, mixing and determination of the reagents, samples and reaction solution under analysis are shared in part or wholly, and in order to prevent the occurrence of errors of determination due to contamination, the analyzer is provided with a function to set the determination conditions for judging the presence or absence of contamination and to make automatic judgement of the combination of items involving contamination, and further characterized in that:

in order to prevent the occurrence of errors of determination due to the generation of new contamination by variation of the state of the apparatus, the analyzer makes judgement on the presence or absence of contamination, memorizes its result, compares the result with those of the previous judgements, and when these results differ more than a certain degree, judges that the state of the apparatus has changed, and indicates it to the user.

2. An automatic chemical analyzer capable of determining the plural components of a sample by using the independent reagents for the respective components, in which the sections of conducting transfer, mixing and determination of these reagents, samples and

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reaction solution under analysis are shared in part or wholly, and in order to prevent the occurrence of errors of determination due to contamination, the analyzer is provided with a function to set the determination conditions for judging the presence or absence of contamination and to make automatic judgement of the combination of items involving contamination, and further characterized in that:

in order to prevent the occurrence of errors of determination due to the generation of new contamination by variation of the state of the apparatus, the analyzer makes judgement on the presence or absence of contamination, memorizes its result, conducts judgement on the presence or absence of contamination in parallel with the determination of the sample, compares the result with those of the previous judgements, and when these results differ more than a certain degree, judges that the state of the apparatus has changed, and indicates it to the user.

3. A recording medium for recording the operation of an automatic chemical analyzer capable of determining the plural components of a sample by using the independent reagents for the respective components, in which the sections of conducting transfer, mixing and determination of these reagents, samples and reaction solution under analysis are shared in part or wholly, and in order to prevent the occurrence of errors of determination due to contamination, the

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analyzer is provided with a function to set the determination conditions for judging the presence or absence of contamination and to make automatic judgement of the combination of items involving contamination, further characterized in that:

in order to prevent the occurrence of errors of determination due to the generation of new contamination by variation of the state of the apparatus, there is installed an operation program according to which the analyzer makes judgement on the presence or absence of contamination, memorizes its result, compares the result with those of the previous judgements, and when the results differ more than a certain degree, judges that the state of the apparatus has changed, and indicates it to the user.